

OPERABLE UNIT 10-04 PROPOSED PLAN
PUBLIC MEETING

FEBRUARY 7, 2002
BOISE, IDAHO

ORIGINAL

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1 BOISE, IDAHO, THURSDAY, FEBRUARY 7, 2002

2

3 MR. SIMPSON: Welcome. I'm Erik Simpson,
4 the community relations plan coordinator for the
5 INEEL Environmental Restoration Program. And we
6 will facilitate tonight's meeting.

7 Tonight we are here to discuss a proposed
8 cleanup plan involving Operable Unit 10-04, which
9 deals with the remediation of unexploded ordnance,
10 TNT, and RDX contaminated soils, bullet fragments,
11 and also the proposed plan discusses the results of
12 the INEEL-wide ecological risk assessment.

13 I don't know if anybody grabbed an agenda,
14 but I will go over it briefly. Tonight, first we
15 will have a presentation. And then we'll have a
16 question-and-answer session. And since we have such
17 a small group, I would like to keep this relatively
18 informal. If you have questions that come up during
19 the presentation, feel free to stop the presenter
20 and ask the question. After the presentation, we
21 will revisit the questions and answers.

22 Following the Q&A session, we will have a
23 short break, and then we will have a time in the
24 meeting where it's called a formal comment session
25 where you can make comments for the record,

I N D E X

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Introduction - Erik Simpson

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Risk Assessment - Chris Hiaring, INEEL

-

QUESTION AND ANSWERS

25

OFFICIAL RECORDING OF STATEMENTS - None

1 officially. We have a court reporter here tonight
2 who will be recording all portions of this meeting.

3 There are other ways to comment on this
4 project as well. We've got this form that is on the
5 back of the proposed plan. I also have hard copies
6 at the back on the table. People can also submit
7 electronic comments via the Internet by visiting our
8 Web Site at INEEL dot gov.

9 I also want to bring this to your
10 attention. On the back of the agenda, we have an
11 evaluation form. Please feel free to jot down a few
12 comments that you have about the format of the
13 meeting, about the quality of the presentation,
14 anything that you like. We will use this as a means
15 of improving how we do our public involvement in the
16 future on these public cleanup meetings.

17 Also, we have documents at the back of the
18 room. We have proposed cleanup plans. And we've
19 got the Federal Facility Agreement and Consent
20 Order, which is the legally binding cleanup
21 agreement between the Department of Energy, the
22 Environmental Protection Agency, and the Idaho
23 Department of Environmental Quality, which mandates
24 the cleanup of the INEEL site.

25 We've got the Remedial Investigation

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1 Feasibility Study for this project. Not real short
2 reading, but if you like, you can look at that
3 during the break, certain sections of that document.
4 We have some fact sheets. And we've got the EM
5 Progress Edition, which is a status report of the
6 Environmental Management Program at the INEEL.

7 At this time, I would like to introduce the
8 presenters, Glenn Nelson. Glenn is with the
9 Department of Energy Idaho Operations Office in
10 Idaho Falls. And he'll discuss the project
11 background of this Operable Unit 10-04 project.

12 Then, we have Chris Hiaring. Chris is the
13 INEEL project manager for the Operable Unit 10-04
14 investigation. And she will provide an overview.
15 Chris will then play risk-assessment expert tonight,
16 where she will discuss the risk assessment that was
17 conducted as part of the Remedial Investigation
18 Feasibility Study.

19 We have Gerry Winter. Gerry is with the
20 State of Idaho Department of Environmental Quality.
21 He will discuss remedial alternatives and summary.

22 MR. NELSON: Glenn, we'll start off
23 tonight. Thank you. Are the front lights dimmable?
24 I see a couple dimmers back there. It doesn't make
25 the presentation any better. Well, I thought they

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1 were dimmers. Okay.

2 One thing that I don't think Erik
3 mentioned -- maybe he did and I missed it. I will
4 try to pay attention. But, there is a sign-up sheet
5 outside, and unless you are here and you are in a
6 stealth mode, you may wish to sign that sign-up
7 sheet so you will be added to the list of thousands
8 of people who get that stuff automatically in their
9 mail from the government. That is up to you, I
10 guess.

11 My name is Glenn Nelson. I'm with
12 DOE-Idaho. I am the WAG manager for Waste Area
13 Group 2. The document that Erik referred to as the
14 Federal Facilities Agreement and Consent Order is
15 this blue-covered document. It just had its tenth
16 birthday last month. This document essentially sets
17 forth the rules on how DOE, the state of Idaho, and
18 the Environmental Protection Agency are going to
19 play with each other, so to speak, in the process of
20 cleaning up remediating areas at the INEEL.

21 It has guidelines in there for reviewing
22 various documents, contains various milestones by
23 which certain activities have to be completed. And
24 it also divides the areas at the INEEL that need
25 remediation into ten groups. Those are called Waste

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1 Area Groups.

2 Now, the subdivision of a Waste Area Group
3 or WAG, as we often call it, is an operable unit.
4 WAG would be here. An operable unit would be a
5 subdivision of a WAG. Where we are in the overall
6 CERCLA process is at this point. We have -- I'm
7 going to guess -- 1,200 pages back there in two
8 volumes, which make up a document called the
9 Remedial Investigation Feasibility Study. The
10 essence of that document is distilled into this
11 much-more manageable three-dozen-page-long document.
12 This is much more digestible.

13 At this point, this document has been
14 mailed out to thousands of folks. You folks are
15 welcome to get a copy tonight if you wish. We are
16 at the point of briefing the public and soliciting
17 your input on this plan.

18 One other thing, before you change that
19 slide, what this document does is it contains in it
20 a prearranged marriage between Waste Area Group 6
21 and Waste Area Group 10. Honestly, I don't know why
22 that was so, but their prearranged marriage was set
23 forth in this document and agreed to by everybody.
24 So, even when we talk about WAG 10, please
25 understand that we are talking about the implied

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1 joint WAG 6 and WAG 10.

2 Next slide, please. The Waste Area Group 6
3 included two reactor facilities, both of which had
4 been shut down by the time the FFA/CO Agreement was
5 written. Operable WAG 10 contains two operable
6 units at this point. One is 10-04, the one that we
7 are talking about tonight, and that concerns surface
8 contamination. The other operable unit under WAG10
9 is 10-08. It concerns groundwater under the INEL.
10 Forgive me if I sometimes call INEEL INEL. This is
11 a new name for us, and I have not found the brain
12 cell that contains the new name for it, so I will
13 often, perhaps, call it INEL.

14 Another significant component of Operable
15 Unit 10-04 is that it contains analyses of the risk
16 to ecological receptors across the INEEL.

17 In the Remedial Investigation Feasibility
18 phase, the large two-volume document on the rear
19 table, 50 sites were identified as possibly needing
20 remedial -- well, needing additional remedial
21 investigation. Nine were subsequently identified as
22 absolutely, definitely needing the remediation.

23 The RI/FS, which is the two-volume document
24 back here on the back here on the shelf, was
25 approved by the state of Idaho, the EPA, and the

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1 Department of Energy. The Shoshone-Bannock Tribes,
2 our neighbor to the south, doesn't actually approve
3 the document, but their input was solicited, and
4 it's reproduced in full in the document.

5 Next slide, please. Waste Area Group 10
6 contains about three different types of problems
7 that we intend to solve with the soil cleanup. Two
8 of these three types of contaminations stem from the
9 fact that gun barrels were calibrated and tested
10 during World War II. Gun barrels for large naval
11 ships were tested at the INEEL. Not all the rounds
12 were live, but some of the rounds that were live did
13 not detonate on impact like they should have.

14 So, the three groups of materials that
15 we're concerned with in Operable Unit 10-04 -- and I
16 will use this visual aid that I brought with me from
17 home -- unexploded ordnance, the things that should
18 have gone bang but didn't. The contents of
19 explosives, military explosives, and, then, finally,
20 a third group back when the INEEL had a rather large
21 army of 5- or 600 folks about a decade and a half
22 ago.

23 They spent a lot of money on training, and
24 so the area where they predominantly trained has a
25 considerable amount of lead and other -- just the

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1 sort of things that you would find in any shooting
2 range, only we had people who were shooting 100,000
3 rounds per year at that time. So, they were highly
4 trained on a wide variety of weapons.

5 Concerning WAG 6, this is just a
6 description of the two reactor facilities that were
7 made part of Waste Area Group 6, and really no work
8 is being done at those because they were deactivated
9 even before the FFA/CO was written.

10 Next slide, please. This is the
11 show-and-tell portion. This is an aerial view of
12 the BORAX facility. As I understand it, it was
13 really one reactor building that had several
14 different cores in it at different times. Is that
15 correct, Tom?

16 MR. HANEY: Yes, it is.

17 MR. NELSON: That means I was listening the
18 last time that you said that.

19 Next slide. This is, I think, the bottom
20 end of an artillery shell that is embedded in the
21 ground and has rusted open, so that it's
22 explosive -- the contents that should have been
23 explosive are available to the environment and you
24 can see how this material has come out and has
25 stained some of the surrounding soil as it has been

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1 weathered.

2 These are chunks of loose explosive
3 material that did not explode like they were
4 supposed to, primarily either TNT or RDX are the
5 common designators.

6 Next slide, please. Not a lot of depth in
7 this slide, but this is a depth charge that just
8 never quite achieved its peak performance. These
9 are in as-found condition at the INEEL.

10 Next slide, please. These are -- at least
11 once upon a time, I don't know how mines are made
12 today but 30 or 40 years ago, mines, apparently, had
13 three primary constituents. A device like this,
14 which was a pressure plate, which then rested on top
15 of a fuse, which I guess was the primary detonating
16 substance, and then the main charge of the mine
17 would be underneath this fuse. So, you are looking
18 here at two of the three key components in a fuse.

19 Yes, Tom.

20 MR. HANEY: You showed me that smaller
21 picture earlier. That is actually the entire -- the
22 little thing sitting up on the top is the fuse.

23 MR. NELSON: Oh, you are changing your
24 testimony.

25 MR. HANEY: Yeah.

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1 MR. NELSON: This is the fuse. This is the
2 mine.

3 MR. HANEY: Yes, it is.

4 MR. NELSON: These are either two types of
5 pressure plates or just opposite sides of similar
6 ones. You can't judge a pressure plate by its
7 cover.

8 Thank you for the clarification.

9 MR. HANEY: You're welcome.

10 MR. NELSON: These are holes in the ground.
11 These were made -- and I don't know actually when
12 the event occurred, but somebody sitting in here
13 will, when various loose pieces of explosives were
14 collected quite some time ago and were placed on a
15 railcar with the idea being that we would detonate
16 them all, and we would get rid of them. And that
17 worked for some of them, but not all of them.

18 So, one of the net effects was a big bang,
19 but also some loose pieces of unexploded ordnance
20 going out in various directions. So, we will have a
21 different cleanup approach the second time to make
22 sure that we truly dispose of these aggravatingly
23 difficult-to-explode items. Those are craters that
24 were created during various prior cleanup attempts,
25 as I understand things.

1 Next slide. Here are some folks that don't
2 have their ducks in a row, but certainly have their
3 shells in a row. This is a piece of angle iron that
4 contains either Primacord or some sort of detonating
5 compound, maybe C4 explosive, but the idea is that
6 these items once found were neatly arranged and then
7 the strip above them was detonated to kind of slice
8 them in half. If anyone wanted to sympathetically
9 detonate, then they had an opportunity to do that.

10 Next slide. This is the gun range where
11 our army was once trained, or at least the INEEL
12 Army. They would put up a genuine paper terrorist
13 target here and then shoot from varying distances.
14 And then this was also a house that I think they
15 used for drinking a soda or maybe practicing house
16 clearings and things like that.

17 There are tons, I think, about 70 tons of
18 heavy metal not of the type that they made CDs of
19 but of the type that you make bullets of. They are
20 buried in that area.

21 The actions that have taken place, the
22 BORAX buried reactor has been capped with a cap that
23 is -- by cap, we don't mean felt or anything like
24 that, but with large rocks and multiple layers of
25 different kinds of soils to make it a very

1 unattractive place where you go for a squirrel to
2 dig a hole in the ground. It's a large no-vacancy
3 sign hung out over the desert that says go somewhere
4 else to do your prowling, plus there is signs for
5 human beings also.

6 A Record of Decision, or a ROD, we have
7 cleaned up about a half dozen sites, also had four
8 removal actions addressing multiple ordnance sites.

9 Next slide, please. This slide I have been
10 waiting for. Chris is my counterpart. She is
11 smarter than I am and prettier than I am, and I will
12 move slides while she charges through this next
13 section.

14 MS. HIARING: Since I have been assigned
15 the risk-assessment portion, our EPA counterpart,
16 who would normally be giving this, could not make it
17 down to Boise, so I was nominated.

18 First, I will be discussing a little bit
19 about the risk-assessment process under CERCLA and
20 how it is applied at the INEEL.

21 This slide shows the four major elements
22 of the risk-assessment process. First, the
23 contaminants of concern must be identified such as
24 what contaminants are there, and if so, under what
25 concentration. Then, exposure pathways must be

1 identified. Exposure pathways are the different
2 routes where contamination may either enter the body
3 or affect the body.

4 The normal pathways used for risk
5 assessments look at dermal or skin exposure,
6 ingestion of both soil and groundwater and skin
7 contact to the same water. Then, we have to
8 identify what receptors we will use in the model.
9 They will be either plant or animal. And OU 10-04
10 used both plant and animal in their risk
11 assessments. Then, the risk from the contaminants
12 of concern using the pathways identified to the
13 receptors are then characterized.

14 The human-health scenario for the 50 sites
15 identified in the Operable Unit 10-04, several
16 risk-assessment scenarios were performed for human
17 health. One risk scenario evaluated the risk to a
18 worker who is working at the INEEL today. Another
19 risk scenario evaluated a worker who would begin
20 working 100 years in the future. Another scenario
21 performed was a residential scenario. This is
22 usually considered the most conservative scenario.
23 This scenario identifies potential risk to a
24 resident who begins living at one of these 50 sites
25 100 years in the future.

1 The occupational scenario takes into
2 account that a worker will be exposed to one of the
3 50 contaminated sites for eight hours a day. The
4 worker would work 250 days a year and worked for
5 25 years. The primary pathways of concern turned
6 out to be ingestion of soil and dermal absorption.

7 This graphic illustration of the different
8 pathways that are evaluated in the future
9 residential scenario. This scenario evaluates the
10 risk to an individual who in 100 years built a house
11 on one of the 50 contaminated sites, lives at the
12 house for 30 years, and is exposed to the area for
13 24 hours a day for 350 days a year. The results
14 identified that the main pathways of concern for the
15 future resident were either homegrown produce,
16 drinking groundwater, and skin or dermal absorption.

17 This busy slide kind of explains the EPA
18 guidance and regulations that are generally used for
19 cleanup decisions. They usually correspond to an
20 excess cancer risk of 1 in 10,000 to 1 in a million,
21 meaning there may be a potential for one additional
22 person to get cancer exposed to the area for
23 24 hours a day for 350 days for the same 30 years.

24 Now, the hazard index measures potential
25 adverse health effects other than cancer. This

1 evaluates impacts to especially sensitive residents,
2 such as children and the elderly. Remediation is
3 considered when the hazard index is greater than 1.

4 As was previously mentioned, the Operable
5 Unit 10-04 investigation evaluated 50 sites and
6 using the risk-assessment process shown on the
7 previous slides determined that at nine sites
8 contamination poses unacceptable risk to human
9 health that must be remediated.

10 The nine sites we grouped -- they were
11 grouped for assessment and remediation based on
12 their contamination types. There were five TNT RDX
13 sites. These are contaminated by chemical compounds
14 remaining from military ordnances testing and the
15 STF Gun Range -- well, it's not grouped.

16 This figure shows a relationship of the TNT
17 RDF sites. I don't know if many of you are
18 familiar. This is map of the whole INEEL. This
19 shows just a small portion. This is the Gun Range.
20 At this location in the forties, they would shoot
21 off towards this direction. And these are the TNT
22 RDX soil sites. They are all located within this
23 area, within the Gun Range.

24 At the nine sites, these five contaminants
25 were identified as the contaminants that posed

1 either ecological risk or both human health and
2 ecological risk. UXO, TNT, 246 dinitrotoluene is
3 the most common explosive used in military
4 ammunition. RDX is also commonly used in military
5 ammunition and is actually known to be more powerful
6 than TNT. Dinitrobenzene is a compound associated
7 with TNT, an unexploded ordnance. They are military
8 munitions that have been primed, armed, or fused and
9 fired, dropped, or launched but have failed to
10 explode either on purpose or by design.

11 Lead is an element that causes severe
12 damage to the nervous system, kidney, and immune
13 systems especially in children.

14 This slide gives the results of the
15 human-health carcinogenic evaluation to the
16 100-year-future resident. Remember, this resident
17 is exposed in 100 years, builds a house, lives there
18 for 30 years, lives in a house for 24 hours a day.
19 All four of the sites fell above the acceptable risk
20 range as given in the EPA guidance. One fell below,
21 and the STF Gun Range was not calculated because the
22 concentrations were very high and it was such a
23 small area.

24 This slide gives the results of the
25 noncarcinogenic human-health evaluation to the

1 future resident. As you can see, all five sites
2 fell above the acceptable risk range, which means
3 that they needed to be cleaned up.

4 And as I mentioned before, because lead
5 levels in the soil at the STF Gun Range were high
6 and the area was so small, the calculation of risk
7 was not necessary. The site went straight into the
8 cleanup group category. Also, risk cannot be
9 calculated for unexploded ordnance.

10 Now, I would like to explain a little on
11 the ecological risk performed on the 50 10-04 sites.
12 Okay. An ecological-risk assessment evaluates
13 possible impacts to plants and animals. The
14 ecological-risk assessment performed for the
15 50 sites in OU 10-04 evaluated risks to mammals,
16 birds, insects, plants, reptiles, amphibians. An
17 individual species that could be found at the INEEL
18 was chosen to study. This individual species would
19 represent the entire group of species that it
20 belonged to.

21 As with human health, the contaminants went
22 through a screening process. An assumption used in
23 the ecological-risk assessment is that the plant or
24 animal would inhabit the contaminated area
25 100 percent of the time.

1 Ecological-risk estimates were developed
2 for these species. Hazard quotients are then
3 developed for plants and animals. This is a ratio
4 between a reference dose and a toxicity value.

5 This slide gives the results of
6 ecological-risk assessment. As you can see, none of
7 these sites are within the acceptable-risk range for
8 ecological receptors. Unexploded ordnance does not
9 pose a risk to ecological-risk receptors.

10 I would like to introduce Gerry Winter, who
11 is with the state of Idaho.

12 MR. WINTER: Thank you, Chris. I'm glad
13 that you came to the public hearing this evening.
14 The Ecological Risk Assessment was a pretty
15 complicated and long-term effort under WAG 10
16 OU 10-04. We have two-risk assessment people here
17 from the Department of Energy that if you have any
18 specific questions that you wanted to ask, they can
19 help you.

20 In this graphic, which is much more
21 pleasing than this graphic, gives you probably an
22 easier approach toward trying to understand the
23 process that was used for Ecological Risk
24 Assessment.

25 We have to follow the remedial-action

1 objectives, and there are three things to recall
2 from this slide as we look at the next slide as to
3 what we were trying to do under 10-04. That is,
4 reduce the risk to humans and ecological receptors,
5 mainly to the TNT, RDX, lead, and unexploded
6 ordnance.

7 We follow the evaluation criteria under
8 CERCLA that includes threshold-balancing criteria
9 and modifying criteria. What is important at this
10 point is to note that the modifying criteria
11 includes community acceptance of what we are
12 proposing as cleanup alternatives. And this is your
13 time, your opportunity, to provide input on these
14 alternatives for remedial action.

15 The TNT RDX contaminator is a result -- the
16 evaluation of these areas resulted in these
17 alternatives, which were required to look at
18 No Action alternative under any scenario as a basis
19 for comparison. Our preferred alternative is 3A,
20 which includes removal of the contaminated soils,
21 treatment, on-site disposal of the soil, and
22 institutional controls.

23 Alternative 3B included removal, treatment
24 but off-site disposal of the soil, and still
25 institutional controls. Alternative 4A is removal,

1 incineration off site, off-site disposal of the
2 soil, and institutional controls. And our last
3 alternative is removal, composting of the soil, and
4 then returning the composted soil to the excavated
5 areas, and institutional controls. The preferred
6 alternative results in conducting a visual survey
7 for the TNT RDX fragments excavating the soil,
8 removing the lumps of TNT RDX, detonating these
9 lumps of TNT and RDX, and then disposing of the
10 waste -- or waste will be disposed on site pending
11 receipt of public input, and then we would backfill
12 and revegetate the excavations and, again,
13 institutional controls.

14 The ordnance areas have resulted in three
15 alternatives, again, the No Action that we are
16 required to look at; Alternative 2, which is Limited
17 Action and Institutional Controls. It would be,
18 basically, what goes on now. There is an activity
19 planned. There would be a survey and clearance done
20 as needed. Alternative 3 is much more extensive.
21 As you can observe from the estimated cost, it
22 includes detection, removal, and institutional
23 controls.

24 One of the goals is to evaluate new
25 technologies. The technologies for ordnance

1 detection are rapidly evolving. They tend to focus
2 on ferrous metal being coincident with explosives.
3 We would select an appropriate site-specific
4 technology, then conduct a survey to try to define
5 the extent and boundaries of the firing fan in the
6 bombing ranges with more than one bombing range.

7 We would log the locations of the probable
8 ordnance, confirm those locations, and clear as
9 appropriate, backfill, and revegetate, and, again,
10 institutional controls are required.

11 The Gun Range Area is much smaller than any
12 of the other sites. We have three alternatives,
13 again: the No Action; the Preferred Alternative
14 includes removal, treatment, and disposal; and
15 Alternative 3B says the same thing -- removal,
16 treatment; and return is the difference. The soil
17 will be treated and returned to the site.

18 Next slide. The Preferred Alternative
19 includes evaluating the berms for the contaminated
20 soils, mechanically screening the soils so we can
21 remove the lead and the casings, which will be sent
22 off for recycling. The soils would be sampled.
23 Those that are clean enough that can be returned to
24 the excavation would be returned. Those that are
25 above the remediation goals would be disposed of at

1 a site depending on input from the public, then
2 contour and revegetate.

3 Then, the important part to note on our
4 schedule is where we are now. This schedule calls
5 for a draft ROD April 1st of this year, a scope of
6 work in September, a work plan in February of 2003,
7 and to begin remedial action in October 2003.

8 Ecological Risk Assessment, as I pointed
9 out, was quite involved in quite a bit of time.
10 You can get specific details from the two
11 risk-assessment people that are here. We looked at
12 a lot of data across the site and included
13 evaluation of individual ecological risk assessments
14 at the individual WAG.

15 Next slide. One of the important things to
16 note, I think, is the percentage of the areas of
17 INEEL that are impacted by these areas of
18 contamination. They are quite low. We were talking
19 about a 890-square-mile site, and a whole ordnance
20 area is roughly 325 square miles. When you get down
21 to the area that we are talking about it's a very
22 small percentage.

23 Because of the uncertainties and the
24 assumptions that were required for the Ecological
25 Risk Assessment, it was deemed important to do

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1 ecological monitoring, which would be focused and
2 will become part of the long-term stewardship
3 program for the INEEL. The plan will be developed
4 this summer.

5 In summary, there is 50 potential release
6 sites. Nine sites pose an unacceptable risk. The
7 ERA indicated minimal risk to the populations. The
8 Preferred Alternative is estimated to cost a
9 combined \$24 million.

10 Thank you. Any questions?

11 AUDIENCE MEMBER: The RDX area, you
12 mentioned you were going to collect the TNT and blow
13 it up. Is there an alternative innovative
14 technology acceptable rather than open-air
15 detonation?

16 MR. WINTER: One of the things that was
17 discussed recently was a proposal to test
18 implosion -- what would you call it, an enclosed
19 implosion technology, but that came about after we
20 already had a proposed plan out the door.

21 AUDIENCE MEMBER: Would you entertain
22 innovative alternative approaches for the
23 destruction of it?

24 MR. WINTER: I'd certainly submit any
25 comments or any suggestions that you would have for

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1 that. That is part of this public acceptance of the
2 proposals is if there is a better mousetrap, tell us
3 about it. It will be considered in -- it's called a
4 Responsiveness Summary.

5 AUDIENCE MEMBER: Would you comment further
6 on what you mean by institutional controls at
7 on-site disposal?

8 MR. WINTER: Institutional controls is
9 typically thought of in terms of deed restrictions.
10 There is some arguments as to whether signs or
11 signage is considered an institutional control but
12 fell under that category. The institutional
13 controls are deemed to be needed because of the less
14 than 100 percent efficiency of most of the detection
15 technologies for ordnance. If there isn't ferrous
16 metal associated with most of these technologies,
17 you can't find the ordnance. A sympathetic
18 detonation test going on out there is scattered, as
19 you saw some of the pictures, just chunks of TNT and
20 RDX. So, there is no ferrous metal associated with
21 some of that ordnance.

22 MS. HIARING: Going out there and
23 monitoring the area or different things that
24 brought it up over time.

25 MR. WINTER: So, there is definite

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1 limitations on the ability of the technologies, the
2 removal actions in the past have been -- I don't
3 believe an excess of 2 foot in depth and some have
4 been surface removals. And at least in my way not
5 comprehensive like around railcar explosion.

6 AUDIENCE MEMBER: So, the institutional
7 controls would be an effort to keep people from
8 residing there?

9 MR. WINTER: That could be one result. It
10 could limit construction or manufacturing, which is
11 what is currently out there now. If there is going
12 to be an action undertaken, they do an ordnance
13 survey and removal where they find ordnance. It
14 happened, I believe, last year when they were
15 installing waste-water discharge lines from INTEC to
16 perc, they found an artillery shell that hadn't been
17 found before.

18 AUDIENCE MEMBER: Did that cover on-site
19 disposal?

20 MR. WINTER: On-site disposal is within the
21 boundaries of the INEEL.

22 AUDIENCE MEMBER: Are you talking about the
23 soil, though?

24 MR. WINTER: I don't think it has been
25 decided yet. One of the options is CFA if it would

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1 meet the waste-acceptance criteria there. Another
2 one considered in the RI/FS was the ICDF, again, if
3 the waste-acceptance criteria would accept it. I
4 think those are the only two that are discussed in
5 RI/FS on site.

6 AUDIENCE MEMBER: When I say the "soil
7 dump," I'm talking about the ICDF. What other areas
8 are you talking about?that means. The Central
9 Facilities Area Landfill off site is off the INEEL.
10 And there are two different locations mentioned
11 there depending on whether it was soils or ordnance
12 -- contaminated soils or ordnance.

13 AUDIENCE MEMBER: What other off sites have
14 been accepted?

15 MR. WINTER: I don't remember the names.
16 One is near Arlington, Oregon. Chemical Waste
17 Management is the other one.

18 MS. HIARING: And a place in Oregon, but
19 they are just suggested. It hadn't been decided.

20 MR. WINTER: They have been suggested.

21 AUDIENCE MEMBER: You mentioned the
22 Shoshone-Bannock Tribe have a major input on this.
23 What is their role?

24 MR. WINTER: Glenn, maybe you would be
25 best to answer that since you had more direct

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1 involvement.

2 MR. NELSON: I had more direct, but very
3 little. I would say that the government is doing
4 its best to respect the cultural values of the
5 Shoshone-Bannock Tribe. We fund to the tune of, I
6 think, approximately \$650,000 a year. We fund
7 various members of the tribe, so that we have an
8 existing group of folks chosen by the tribes to be
9 the single point of contact with the Department of
10 Energy.

11 So, we strive to be good neighbors, and we
12 strive to involve them in the review of -- not just
13 in review of the documents, but we strive to get
14 their input and to act on it where we are able too.
15 They have different cultural values than a lot of
16 us, but we are doing our best to be sensitive to
17 them. That is about the best I can tell you.

18 MR. WINTER: I think, maybe, one other
19 thing to add is that they are not in favor of the
20 quantitative-risk-assessment approach that is used
21 under CERCLA. They take a much more holistic view
22 as they determine, including visual, the land, and
23 the biota on the land. It's not easily quantified
24 the way they look at it compared to the way that we
25 look at it under CERCLA. They have a summary that

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1 is in the RI/FS, as Glenn mentioned, Appendix A.

2 AUDIENCE MEMBER: When the lead soil --
3 once you remove the lead out of the soil, have they
4 done any stabilization of soils successfully out
5 there at INEEL before?

6 MR. WINTER: For lead, this is the first
7 one that I'm aware of.

8 Robin, do you know if they have done any
9 others?

10 MS. HIARING: To date, they have sent it
11 off site to be stabilized.

12 MS. VANHORN: They are proposing to be able
13 to do that at ICDF.

14 MR. WINTER: Any other questions?

15 AUDIENCE MEMBER: There was slide that had
16 dates that we went through very quickly. Can we see
17 that slide, or is it in here?

18 MS. HIARING: It's in a copy of the
19 handout, a copy of the slide.

20 MR. WINTER: Erik, is it worthwhile to
21 point out that an extension has been requested by
22 the Citizens' Advisory Board?

23 MR. SIMPSON: Yes, the original 30-day
24 comment period extension has been extended to end on
25 March 29th. That request came from the Citizens'

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1 Advisory Board. By policy, the DOE grants that
2 extension request. Any other questions?

3 Thanks, Gerry. I guess at this time I'll
4 skip the break. If anyone would like to make
5 official comments for the record on this proposed
6 cleanup plan, now is the time to do it. We have,
7 as I mentioned earlier, a court reporter, who will
8 record any comments we get verbatim. So, if you do
9 have any comments for the record, please clearly
10 speak your name and give your address, and we will
11 send you a copy of the Record of Decision, which is
12 scheduled to be signed this year. So, does anybody
13 want to make any formal comments?

14 Okay. With that, we'll stick around for a
15 little while after the meeting. If you have any
16 questions, feel free to grab one of us or the
17 project managers who are here.

18 With that, thank you for coming. We look
19 forward to seeing you again at one of our cleanup
20 meetings in the near future.

21 (Meeting adjourned.)

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23
24
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1 STATE OF IDAHO }
2 County of Ada } ss.
3)

4 I, NANCY SCHWARTZ, Certified Court Reporter
5 No. 483 and Notary Public in and for the State of
6 Idaho, do hereby certify:

7 That said hearing was taken down by me in
8 shorthand at the time and place therein named and
9 thereafter reduced to computer type, and that the
10 foregoing transcript contains a true and correct
11 record of the said hearing, all done to the best of
12 my skill and ability.

13 I further certify that I have no interest
14 in the event of the action.

15 WITNESS my hand and seal this 25th day
16 of March, 2002.

17
18

Nancy Schwartz, Notary
Public in and for the

20 State of Idaho

21
22

23 My commission expires:
March 19, 2007

24
25

1 STATE OF IDAHO)
2 County of Ada) Ss.

3

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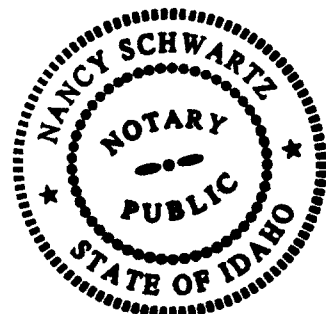
22

23 My commission expires:
24 March 19, 2007

24

25


Nancy Schwartz, Notary
Public in and for the
State of Idaho



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